TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT NO. 43072

I. INTRODUCTION

This renewal permit is for the operation of Boral Material Technologies, Inc. (BMTI) fly ash collection, storage and loading facility, which is located in Cochise, Cochise County, Arizona.

Company Information

Facility Name:	Boral Material Technologies, Inc.
Mailing Address:	45 NE Loop 410, Ste 700 San Antonio, TX 78216
Facility Location:	3527 North Highway 191 Cochise, AZ 85606

II. FACILITY DESCRIPTION

The facility is a coal combustion product marketer working directly with the coal fired electric generators. The material collected and marketed by BMTI from the Arizona Electric Power Cooperative (AEPCO) Apache Facility is fly ash.

Fly ash is a by-product of burnt coal that is captured in the flue gas stream of the power plant by electrostatic precipitator hopper (ESPs). The fly ash is then pneumatically conveyed in a closed loop system to a collection hopper that operates under vacuum. The material is thin gravity fed, with small aeration pads for additional fluidizing, into a sealed transfer pod. This transfer pod is connected to a positive pressure transfer line through a double sealed knife gate valve. Once the transfer pod is filled to a preset level, the fill valve is closed and the bottom knife gate is opened allowing material to be introduced into the positive pressure, dilute phase airstream. The material is pneumatically transferred to a secondary holding silo, equipped with a filtering baghouse. All holding silos are equipped with an aeration blower for fluidizing the material for transfer. All silos are also outfitted with baghouses that filter the incoming airstream before being discharged to atmosphere through a blower fan. All silos are completely sealed from outside elements and are inter-vented using eight-inch "V" shaped black pipe. All material must then be transferred to the loadout silo where it is loaded into pneumatic bulk trucks using an articulate loadout boot and shipped to the end-user. A baghouse is used to capture any dust generated while loading the truck.

III. LEARNING SITES IN VICINITY

There are no impacted learning sites within a two mile radius of this facility.

IV. COMPLIANCE HISTORY

There was one air quality case associated with BMTI, Place ID #0439, which was initiated in 2001. There were four air quality facility inspections associated with this facility (Inspection IDs: 24097, 24099, 33401, and 90028).

V. APPLICABLE REGULATIONS

The Permittee has identified the applicable regulations that apply to each unit in its permit application. The following table summarizes the findings of the Department with respect to the regulations that are applicable to each emissions unit. Previous permit conditions are discussed under Section VI of this technical review document.

Applicable Regulations

Unit ID	Year of Manufacture	Control Equipment	Applicable Regulations	Verification
Fugitive Dust	Not Applicable	Water and other reasonable precautions	*A.A.C.* R18-2-602 R18-2-604.A R18-2-604.B R18-2-605 R18-2-606 R18-2-608 R18-2-612 R18-2-702	The regulations listed are applicable to non point sources.
Storage & Load-Out Silos	1980/1997	Baghouse	*A.A.C.* R18-2-730	Standard of performance for Unclassified Sources.

VI. PREVIOUS PERMITS AND CONDITIONS

A. Previous Permits

The following table lists the previous permits that have been issued to Boral Material Technologies, Inc.

Previous Permits

Date Permit Issued	Permit #	Application Basis
July 23, 2002	1001772	Operating Permit

B. Previous Permit Conditions

The following are discussions on the previous permits that have been issued to the source.

CLASS II, NON-TITLE V OPERATING PERMIT NO. 1001772

This operating permit was issued to BMTI on July 23, 2002 to operate a Flyash Collection, Storage & Loading Facility.

OP #1001772, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. A.	X				General provisions - revised to represent most recent language

OP #1001772, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att.B.I.A	X				Facility Wide Requirements-person on call certified in EPA Reference Method 9 changed from 30 days to day 1.
Att B.I.B		X			Facility Wide Requirements
Att B.II.		X			Storage Silos, Trucks, and Railcars-Opacity & particulate matter, air pollution control.
Att B.III		X			Non-point Sources-emission limitations/standards.
Att B.IV	X				Mobile Source Requirements.
Att C		X			Equipment List

VII. MONITORING REQUIREMENTS

Opacity

The permit specifies opacity limitations for the various emission sources located within the facility. Monthly EPA Method 9 observations of visual emissions from all process equipment are to be performed by certified Method 9 observer.

VIII. TESTING REQUIREMENTS

The Permittee is to keep records of the date, location, time and the results of any EPA Method 9 observation made, as well as the name of the observer who conducted the test.

IX. LIST OF ABBREVIATIONS

ft ..... Feet
g ..... Grams
HAP ..... Hazardous Air Pollutant
hp ..... Horsepower
hr ..... Hour
IC ..... Internal Combustion
lb ..... Pound
m ..... Meter
MMBtu ..... Million British Thermal Units
$\mu g/m^3$ ..... Microgram per Cubic Meter
NO_x ..... Nitrogen Oxide
NO_2 ..... Nitrogen Dioxide
O_3 ..... Ozone
Pb ..... Lead
PM ..... Particulate Matter
PM_{10} ..... Particulate Matter Nominally less than 10 Micrometers
Psia ..... Pounds per square Inch (absolute)
PTE ..... Potential-to-Emit
s ..... Seconds
SO_2 ..... Sulfur Dioxide
TPY ..... Tons per Year
TSP ..... Total Suspended Particulate

USEPA ..... United States Environmental Protection Agency
VOC ..... Volatile Organic Compound
yr ..... Year